

BEST AVAILABLE COPY

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 April 2005 (07.04.2005)

PCT

(10) International Publication Number
WO 2005/031310 A3

(51) International Patent Classification⁷: **B01D 9/00**

(21) International Application Number:
PCT/US2004/031739

(22) International Filing Date:
27 September 2004 (27.09.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/506,125 25 September 2003 (25.09.2003) US

(71) Applicant (for all designated States except US): **SAGRES
DISCOVERY, INC** [US/US]; P.O. Box 8097, Emeryville,
CA 94662-8097 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **HANSON, Michael**
[US/US]; c/o Sagres Discovery, Inc, P.O. Box 8097,
Emeryville, CA 94662-8097 (US).

(74) Agents: **LAUNER, Charlene, A. et al.**; Chiron Corpora-
tion, Intellectual Property, P.O. Box 8097, Emeryville, CA
94662-8097 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

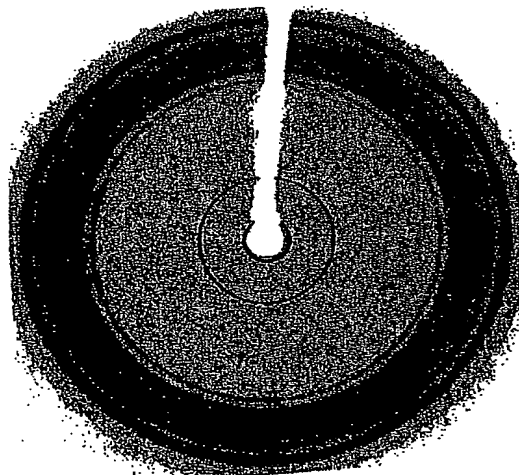
(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

[Continued on next page]

(54) Title: **FRACTAL-FORMING ALKYLKETENE DIMERS FOR INTEGRAL MEMBRANE PROTEIN CRYSTAL GROWTH**



(57) Abstract: This invention provides a device for promoting crystallization of integral membrane proteins using a surface of alkylketene dimers doped with a nucleating compound. A coating that enhances crystallization of integral membrane proteins in the presence of detergent is provided. In another aspect of the invention methods of creating a surface of alkylketene dimers doped with a nucleating compound to promote crystallization of integral membrane proteins are provided. In another aspect of the invention methods of crystallizing integral membrane proteins using surfaces coated with alkylketene dimers doped with a nucleating compound are provided.

WO 2005/031310 A3



(88) Date of publication of the international search report:
30 June 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.